GUIDELINES FOR SEQUENCING SAMPLE SUBMISSION

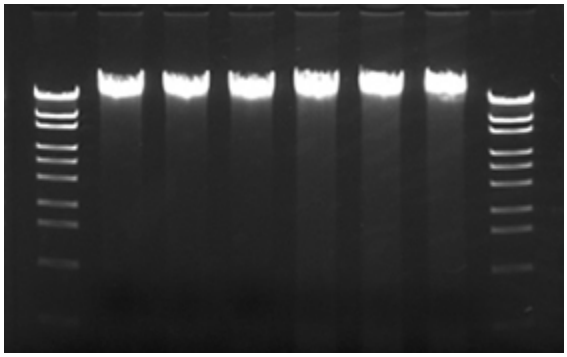
DNA Type - Genomic DNA; BAC, Plasmid, Cosmid DNA; Long-range PCR (>1.5kb)

DNA Quantity for library preparation:

- At least 500 ng for rapid library preparation
- At least 5 ug for general library preparation
- At least 5 ug for 3kb paired end library preparation
- Quantitation should be performed using a **PicoGreen** Assay (if you do not have one, we can do it for you)
- ***NanoDrop UV and NanoDrop Fluorometry are NOT compatible with this protocol***
- We highly recommend you to prepare and provide us some extra amount of DNA to ensure timely process of your samples

DNA Quality for library preparation:

- Must be double-stranded
- Should not be a product of whole genome amplification
- Should not be degraded – verified by agarose gel
- ***The DNA sample will NOT be accepted with out the agarose gel image***
- Should contain NO particulate matter
- Should have an OD 260/280 ~ 1.8
- Sample should have a minimal concentration of 50ng/ul in TE, H2O, or Tris for rapid or general library preparation and in H2O or Tris for paired end library preparation
- Sample should NOT have RNA contamination (gDNA or BAC DNA) or primer/ primer dimers (long-range PCR)



Example of gDNA run in 1% agarose gel

RNA Type

The sample RNA Requirements for cDNA rapid library preparation:

- total amount of RNA > 200 ng
- sample volume < 19 µl
- quantitated by Ribogreen
- pure (OD 260/280 > 1.8)
- DNA free
- **enriched in RNA of interest**. For example, if the RNA of interest is mRNA, remove ribosomal RNA prior to proceeding with the procedure. More specific: to generate mRNA, extract the total RNA first, then perform the DNase I treatment of the sample, then isolate mRNA, then re-isolate mRNA one more time. It should be at least two rounds of mRNA purification performed to remove the ribosomal RNA contamination.
- quality assessed on an RNA 6000 Pico Chip on the Agilent 2100 Bioanalyzer instrument. A typical RNA sample will produce a smear that ranges from 0.2 kb to 7 kb. This protocol is not designed for preparing small RNA molecules, for example snoRNA, microRNA, tRNA, etc.

For all other types of samples, please contact Alina Akhunova via email akhunova@ksu.edu or by phone (785) 532-1393